REMARKS

Claims 1 – 21 are pending in the application. Claims 12 – 21 have been cancelled. Claims 1 – 3 and 5 – 11 have been amended. Claims 1 – 11 accordingly remain pending in the application.

A marked-up copy of the amended claims is provided herewith illustrating the changes.

A new declaration has been provided pursuant to the Examiner's request.

The Examiner objected to the drawings. Claims 12-21 have been cancelled, thus rendering aspects of this rejection moot. In addition, Applicant has amended Figs. 3a and 4to illustrate the back plane and connector parts. No new matter has been added. The features illustrated in the amended drawings are described in the specification, for example, at page 7, lines 25-27 and page 8, lines 18-22, and are similarly illustrated in Figs. 1a and 2 which, taken in context, have been used to show differences between the structure of the prior art and embodiments of the present invention.

The title has been amended.

The claims have been amended to overcome the Examiner's objections. The claim amendments are also believed to overcome the rejection under 35 U.S.C. 112, second paragraph.

Claims 1, 2, and 5-9 stood rejected under 35 U.S.C. 102(b) as being anticipated by Wright. Claims 3, 4, 10 and 11 stood rejected under 35 U.S.C 103 as being unpatentable over Wright.

Wright discloses a complex lever mechanism that includes a support block which, in use, is attached to a panel 3 (see the abstract). A first lever is pivotally connected to the support block (in a projection that extends from the support block). The first lever includes a second latching lever for engagement with the support block. Accordingly, it can be seen that the Wright mechanism is complex, and therefore expensive to manufacture.

In contradistinction thereto, the present invention provides a very simple lever mechanism which is simpler and less expensive to manufacture. In particular, as specified in Claim 1, the lever mechanism is mounted about a pivot axis that passes through the circuit board. Accordingly, the complexities of the support mechanism, the projection, etc, shown in Wright may be unnecessary.

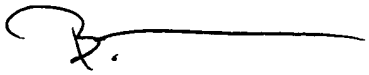
Various alternative arrangements may be used to provide for the flexible coupling between the lever arm and the engaging projection. As variously recited in the claims, this can be provided by means of a mounting of the pivotally mounted lever on the circuit board that provides translatory as well as pivotal movement, with a biasing member coupled to the pivotable mounting providing a biasing force for biasing the circuit board towards the back plane, or alternatively, a flexible mounting of the engaging projection can be provided. **Wright neither discloses an arrangement whereby a lever arm can be mounted on a circuit board about a pivot that passes through that circuit board whereby translatory as well as pivotable movement can be provided, nor any arrangement whereby a flexible engaging projection is provided on a chassis.**

Furthermore, there is no teaching or suggestion in Wright that would provide motivation for the skilled person to arrive at the subject matter as recited in the amended claims.

In accordance, independent claims 1, 6, 7, and 8, along with their dependent claims, are believed to patentably distinguish over Wright.

In view of the foregoing, the application is believed to be in condition for allowance. The Commissioner is authorized to charge any fees which may be required, or credit any overpayment, to Conley, Rose & Tayon, P.C. Deposit Account No. 501505\5681-03400\BNK.

Respectfully submitted,



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Marked Up Version of Amended Claims

1. [An] A circuit board ejector mechanism [for a circuit board and back plane] operable to provide resiliently biased engagement between a first part of an electrical connector mounted on a circuit board and a mutually engaging second part of said electrical connector mounted on a back plane, said first and second parts of said electrical connector providing electrical connection for a plurality of electrical channels between said circuit board [on which said first part is mounted] and said back plane [on which said second part is mounted], said ejector mechanism comprising

an engaging projection mountable on a chassis with respect to which [one of said circuit board and] said back plane is mounted; and

a lever arm pivotally mountable [with respect to the other] about an axis that passes through said circuit board [and said back plane] and configured to engage said engaging projection, said lever arm being operable to apply an engaging force to said engaging projection to urge said circuit board towards said back plane when moved from a first position to a second position, which engaging force causes said first and second parts of the connector to engage,

wherein said engagement of said lever arm and said engaging projection is provided by a flexible coupling which allows relative movement of said circuit board with respect to said back plane and a biasing force which biases said circuit board towards said back plane.

2. An ejector mechanism as claimed in Claim 1, wherein said flexible coupling is provided by said engaging projection being [which is] formed from a resiliently deformable material, said material providing said relative movement and said biasing force of said circuit board towards said back plane.

3. An ejector mechanism as claimed in Claim 1, wherein said flexible coupling is provided by said engaging projection [which is] being formed by a rigid member slidably mounted on said back plane and a biasing member connected [to said back plane] between said chassis and said engaging projection, said slidable mounting providing said relative movement and said biasing member providing said biasing force for biasing said circuit board towards said back plane.

5. An ejector mechanism as claimed in Claim 1, wherein said flexible coupling is provided by a [slidable] mounting of said pivotably mounted lever arm on said circuit board that provides translatory as well as pivotal movement [and a biasing member coupled to said pivotable mounting and said circuit boad, said slidable mounting providing] to provide said relative movement between said lever arm and said engaging projection, and a [said] biasing member coupled to said pivotal mounting providing said biasing force for biasing said circuit board towards said back plane.

6. An assembly including a circuit board, a chaassis and a back plane [comprising, respectively], a first part of an electrical connector being mounted on said circuit board and a mutually engaging second part of said electrical connector being mounted on said backplane, said first and second parts of said electrical connector providing electrical connection for a plurality of electrical channels between said circuit board [on which said first part is mounted] and said back plane, said back plane being mounted with respect to said chassis [on which said second part is mounted], and

an ejector mechanism having:

an engaging projection mounted [with respect to one of said circuit board and said back plane] on said chassis; and

a lever arm pivotally mounted [with respect to the other of] about an axis that passes through said circuit board [and said back plane] and configured to engage said engaging projection, said lever arm being operable to apply an engaging force to said engaging projection to urge said circuit board towards said back plane when moved from a first position to a second position, which engaging force causes said first and second parts of the connector to engage,

wherein said engagement of said lever arm and said engaging projection is provided by a flexible coupling which allows relative movement of said circuit board with respect to said back plane and a biasing force which biases said circuit board towards said back plane.

7. A circuit board comprising

a first part of an electrical connector arranged to mutually engage a second part of said electrical connector, which second part of said electrical connector is mounted on a back plane, said first and second parts of said electrical connector providing electrical connection for a plurality of electrical channels for said circuit board,

a lever arm pivotally mounted about an axis that passes through [on] said circuit board and configured to engage an engaging projection mounted on a chassis with respect to which said back plane is mounted, said lever arm being operable to apply an engaging force to said circuit board by engagement with said engaging projection when moved from a first position to a second position, which engaging force causes said first part of said electrical connector to engage with said second part of the connector, wherein said [lever arm is slidably mounted on said circuit board and a biasing member is coupled to said pivotable mounting and said circuit board, said slidable mounting providing relative movement between said lever arm and said engaging projection, said biasing member providing a biasing force against said slideable movement] mounting of said pivotably mounted lever arm on said circuit board provides translatory as well as pivotal movement to provide relative movement between said lever arm and said engaging projection, and a biasing member coupled to said pivotal mounting providing a biasing force for biasing said circuit board towards said back plane.

8. A chassis supporting a back plane arranged to receive at least one circuit board, said back plane comprising

at least one second part of an electrical connector, mounted on said back plane and engageable with a first part of said electrical connector mounted on said circuit board, [and] wherein

an engaging projection, engageable with a lever arm formed on said circuit board, is mounted on said chassis, [wherein] said engaging projection [provides] providing a flexible coupling which allows relative movement of said circuit board with respect to said chassis, and thereby with respect to said back plane and a biasing force which biases said circuit board towards said back plane.

9. A chassis [back plane] as claimed in Claim 8, wherein said engaging projection is formed from a resiliently deformable material, said material providing said relative movement and said biasing force of said circuit board towards said back plane.

10. A chassis [back plane] as claimed in Claim 8, wherein said engaging projection is formed by a rigid member slidably mounted on said chassis [back plane] and a biasing member connected between said chassis [to said back plane] and said engaging projection, said slidable mounting providing said relative movement and said biasing member providing said biasing force for biasing said circuit board towards said back plane.

11. A chassis [back plane] as claimed in Claim 10, wherein said biasing member is a spring or a resiliently deformable member.

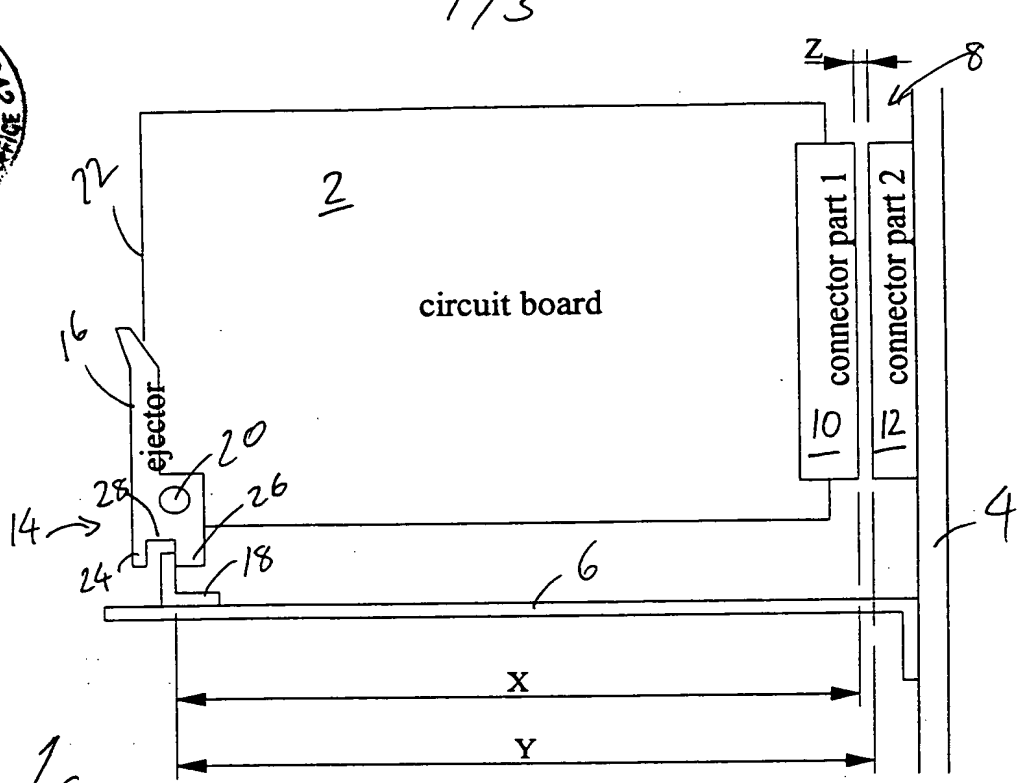

Fig. 1a

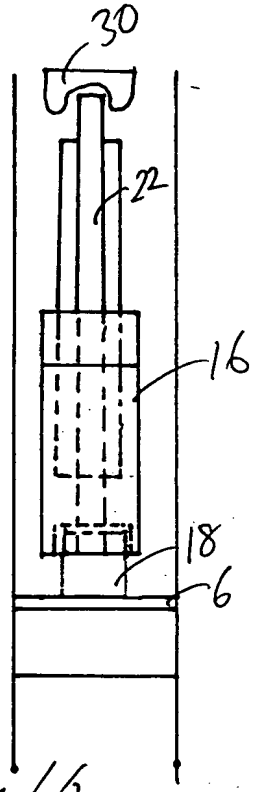

Fig 1b

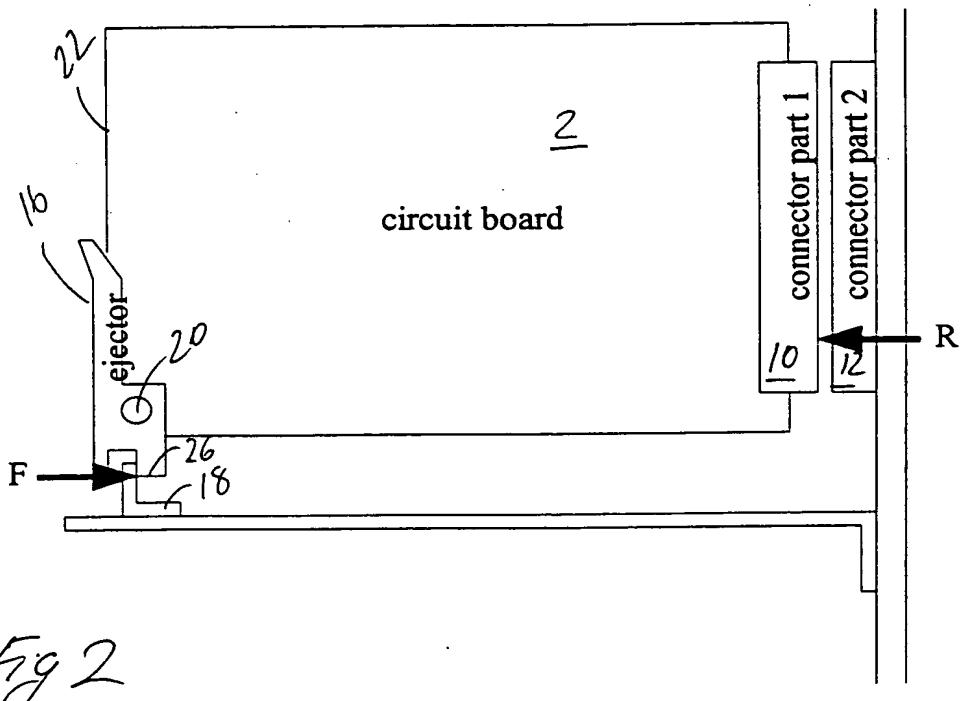

Fig 2

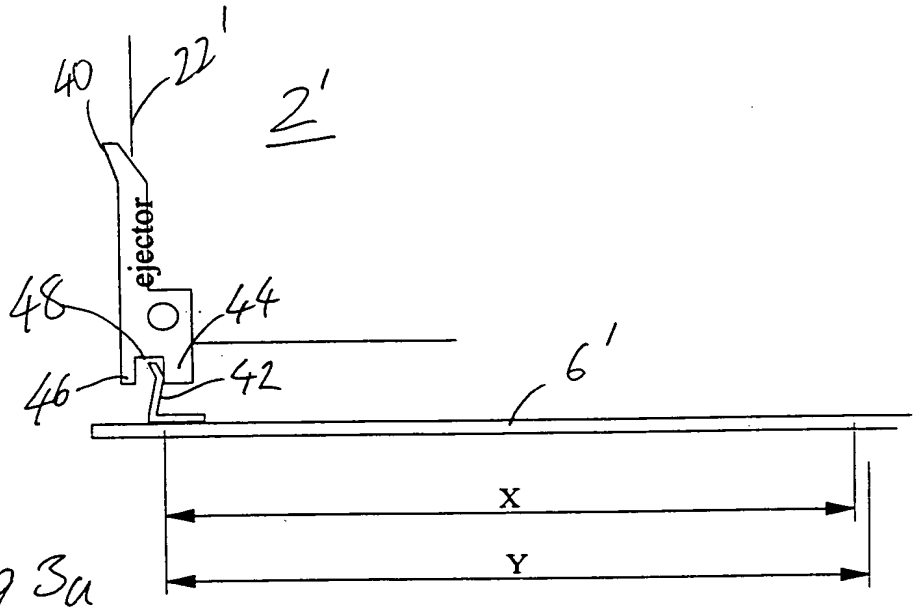

Fig 3a

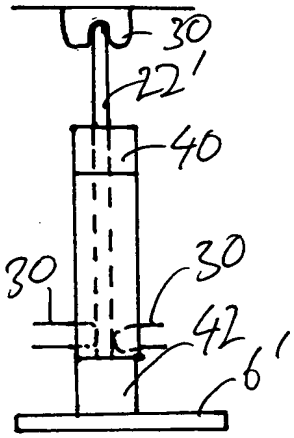

Fig 3b

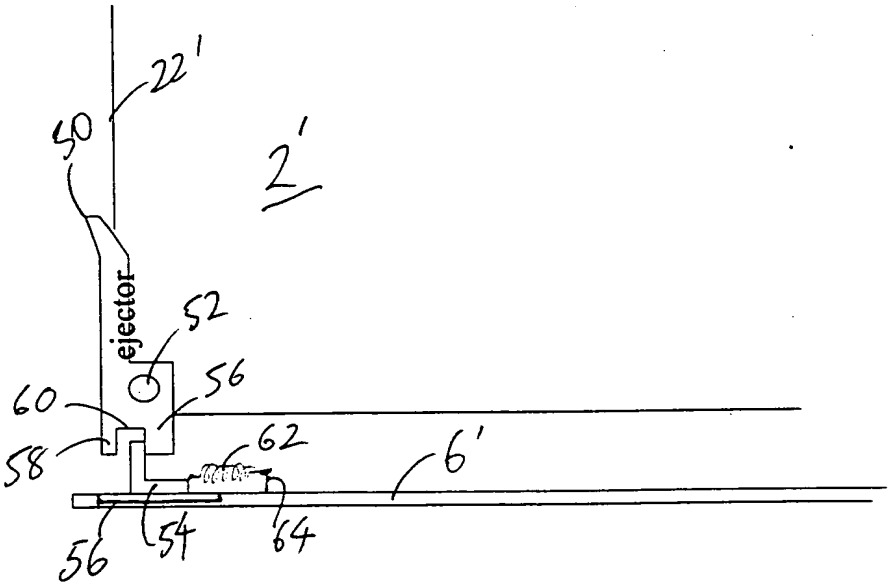

Fig. 4

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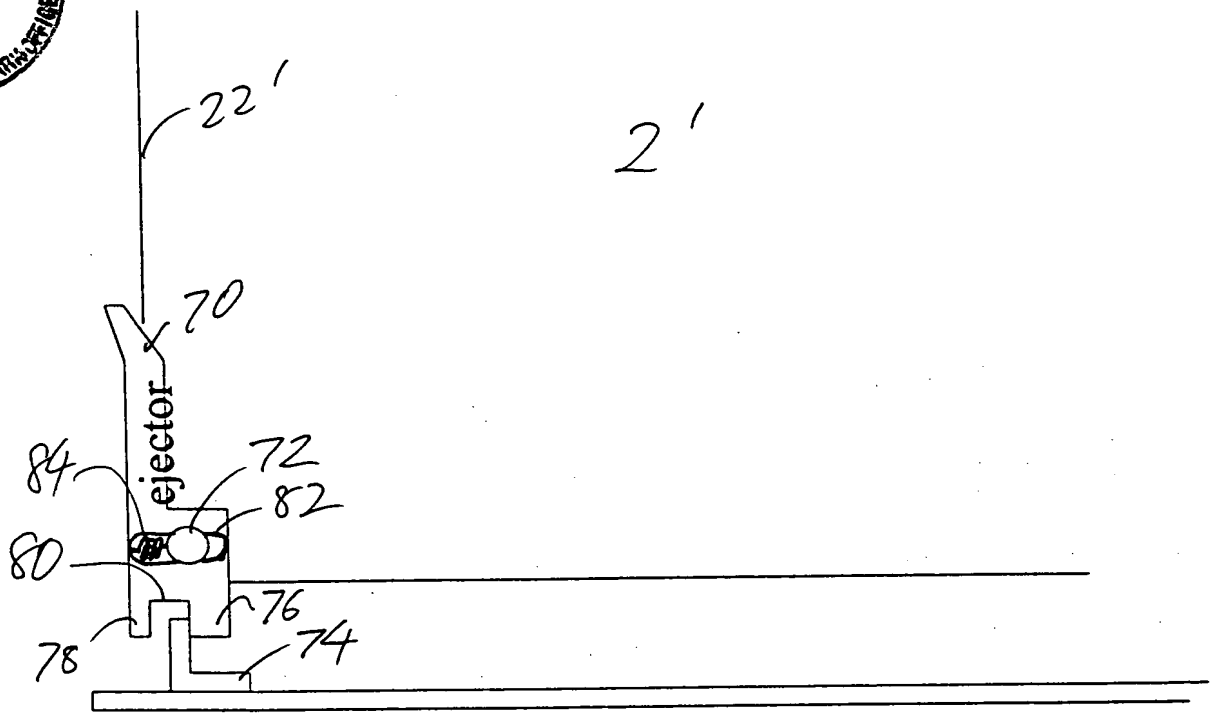

Fig 5